Make Chimerica Great Again*

Niall Ferguson
niallf@stanford.edu

Xiang Xu
seanxuxiang@126.com

Economics Working Paper 18105

HOOVER INSTITUTION
434 GALVEZ MALL
STANFORD UNIVERSITY
STANFORD, CA 94305-6010

May 3, 2018

A decade after the outbreak of the global financial crisis, a large trade imbalance between the world's two biggest economies, the U.S. and China, still exists and is more politically contentious than ever. This economic relationship, which we termed "Chimerica" in 2007, seemed likely to end as a result of the global financial crisis. Yet this did not happen. In this paper we examine the evolution of Chimerica in the aftermath of the global financial crisis and explain how the stimulus policies of both the U.S. and China have contributed to its survival. We show how stimulus policies helped change Chimerica from a marriage of opposites to a marriage of equals. We then explain why this marriage is now destined for strife, in the form of a trade war between the U.S. and China. The consequences of such a trade war would deeply impact the global economy. We believe constructive negotiations on trade rebalancing and policy coordination are therefore needed to avoid a disruptive end to Chimerica.

Keywords: Chimerica; trade war; exchange rate policy
JEL: E44; F13; O24

* Niall Ferguson is the Milbank Family Senior Fellow at the Hoover Institution. Xiang Xu (correspondent) is the William C. Bark National Fellow at Hoover Institution and assistant professor at Central University of Finance and Economics. We are grateful to Lawrence Summers, Alice Siqi Han, Manuel Rincon-Cruz, Christopher Miller, Catherine Macaulay and Paul Schmelzing for their helpful comments on earlier drafts.

1. Introduction

When the concept of "Chimerica" was first created (Ferguson and Schularick, 2007), it was intended to encapsulate a new world economic order that combined Chinese export-led economic growth with U.S. over-consumption. Chimerica was an unlikely financial marriage between the world's sole superpower and its most likely future rival. Behind this two-sided economic phenomenon was the integration of a massive Asian labor force and savings surplus into the world economy, which increased global returns on capital, by reducing labor costs, while depressing the cost of capital. Thanks in large measure to its symbiotic relationship with the United States, China is now (on a current dollar basis) the second-largest economy in this world. Its GDP in 2017 was equal to the sum of total output from Great Britain, France, Italy, India, and Brazil. Chimerica, as a whole, accounts for more than 34% of the world's total GDP based on purchasing power parity, 38% of household financial consumption, and 20% of international trade.

For the United States, meanwhile, Chimerica meant cheaper consumer goods and lower interest rates—a significant factor in the U.S. housing bubble of the mid 2000s. We expected the global financial crisis of 2008-2009 to be the beginning of the end of Chimerica (Ferguson and Schularick, 2011). Bilateral trade volumes certainly fell sharply for a time, and the yuan appreciated against the U.S. dollar between June 2010 and January 2014. There was also a good deal of mutual recrimination about economic and especially monetary policy. Ten years later, however, against the expectations of most scholars and market analysts, Chimerica still exists. China still accounts for half of the total U.S. trade deficit. The People's Bank of China (PBOC) allowed the yuan to weaken against the dollar for nearly three years beginning in January 2014. And, despite significant capital outflows in 2015, China still has over $3 trillion in foreign exchange reserves as insurance against future crises, the bulk still held in U.S. dollars. On the surface, Chimerica appears to be functioning smoothly. Far from being a chimera, as we originally hypothesized, it has become a seemingly stable symbiosis.

Yet today's Chimerica is significantly different from its 2007 antecedent. For one thing, China itself has changed. It might be said that it has come increasingly resemble to the United States, with rising levels of household consumption, higher wages and an

increasingly complex financial system characterized by shadow banking, off-balance-sheet entities and a very large aggregate debt burden. The biggest change, however, is in the United States. Since the election of Donald J. Trump as president in November 2016, American leadership has taken an anti-Chinese turn. The new National Security Strategy, published in December 2017, explicitly identified China—along with Russia—as a "strategic competitor" of the United States. On trade, too, the Trump administration has taken a more combative approach than its predecessors. On January 22, 2018, President Trump decided to impose 30% tariffs on solar panels, and later washing machines. In March he announced tariffs on imported steel and aluminum (of respectively 25% and 10%) on grounds of national security under section 301 of the Trade Act of 1974, to take effect on March 23. Though not specifically directed at China, this move was widely interpreted as a harbinger of a trade war targeting China, especially as the U.S. exempted certain American allies from the tariffs. On March 23, China announces 15-25% tariffs on 128 products, including pork, in response to the steel and aluminum tariffs, to take effect on April 2. That same day, the U.S. published a list of 1,333 Chinese products worth $50 billion that could be subject to new 25% tariffs. On April 4 China filed a WTO complaint on the $50 billion list of products and threatened to impose a 25% tariff on an equivalent amount of U.S. imports, including soybeans. The next day, President Trump asked the U.S. Trade Representative to consider imposing tariffs on an additional $100 billion of Chinese imports. In the first week of May, a U.S. trade delegation went to Beijing to meet with their Chinese counterparts. The American demands—which included a $200 billion reduction in the bilateral trade deficit—represented a significant escalation. No agreement was reached, other than to continue the talks.

What happened to Chimerica after the global financial crisis? Was a trade war inevitable and will it finally end the Chimerican marriage after a decade of unexpected stability? In this paper we seek to answer these questions. We believe the history of Chimerica can be divided into three different periods. The first period, or Chimerica 1.0, follows the classic "marriage of opposites" model described in Ferguson and Schularick (2007 and 2009). This period ended in 2009, when the financial crisis

seemed to have broken this bilateral economic relationship and both U.S. and China came up with national stimulus plans. The next period, from 2009 to 2015, was Chimerica 2.0, during which loose monetary policies changed Chimerica from a marriage of opposites into one of those marriages in which the two spouses come to resemble each other. Both countries' retreat from expansionary monetary policies marks the end of this period, and Chimerica 3.0 can be said to have started in 2015. In this period, the Chinese authorities' determination to maintain their foreign exchange reserves and to control the yuan's exchange rate made the relationship increasingly intolerable to the U.S. Though it is conventionally attributed to Donald Trump's election, we see the advent of American protectionism as a response to Chinese policy.

Using data on both trade and international relations, we are able to empirically investigate the potential outcomes of a trade war between the world's two biggest economies. Most media analysis of the Trump administration's tariffs is negative. Reputable commentators on economics and international relations warn that the "liberal international order" could be dealt a fatal blow by the U.S. However, our estimations show that the U.S., as the initiator of this trade war, has a good chance of achieving its goal to reduce the bilateral trade deficit with China. The possible responses by the Chinese government, aside from retaliatory tariffs on imports from the U.S., include a major currency devaluation which could destabilize the global economy, or coordination with other countries to launch WTO proceedings against the U.S. If the trade war escalates, China may extend the conflict to geopolitics, where its position may be stronger, but the results would be even more uncertain. We believe that constructive negotiations are needed to avoid a disruptive Chimerican divorce, and that China ought to take the lead in this process.

The rest of this paper is organized as follows. Section two investigates how Chimerica survived the 2007-2009 global financial crisis thanks to stimulus policies carried out by both players. Section three summarizes the developments in Chimerica 3.0 after both countries retreated from monetary easing, and why a trade war between the world's two biggest economies became inevitable. Section four studies the potential

impacts of this trade war on the world economy. Section five asks if this is the right time to end Chimerica once and for all. Section six concludes the paper.

2. Chimerica 2.0 – a marriage of equals after the global financial crisis

The financial crisis of 2008-2009 appeared to mark the end of the symbiotic Chimerica relationship—Chimerica 1.0. Facing a huge decline in total exports, China had little choice but to appreciate its currency against the U.S. dollar. The U.S. experienced the longest recession since the Great Depression and its current account deficit fell by $300 billion, mostly due to shrinking imports "Chimerica" seemed to no longer be the right term to characterize the world economic order, and commentators seized on new concepts such as "secular stagnation" or the "new mediocre."

But Chimerica survived. Both Washington and Beijing chose to counter the negative effects of the financial crisis through economic stimulus plans and loose monetary policies. In the U.S., the Troubled Asset Relief Program (TARP) was passed by Congress and implemented by both the Bush and Obama administrations to keep credit flowing to consumers and businesses. At the same time, the U.S. Federal Reserve expanded its balance sheet dramatically through three rounds of quantitative easing from 2009 to 2012, contributing to the 1.7% decline in unemployment and 2.5% increase in GDP growth in that period. In China, the State Council announced on August 2008 a stimulus plan to invest 4 trillion yuan in infrastructure and social welfare facilities in 2009 and 2010, which was funded mainly by bank loans. The People's Bank of China (PBOC), China's central bank, also cancelled all restrictions on commercial bank lending to support the real economy. As a result of this stimulus plan, China's M2/GDP ratio rose by 30% in 2009 alone, and the real GDP growth rate rose by 1.2% to 10.6% in 2010.

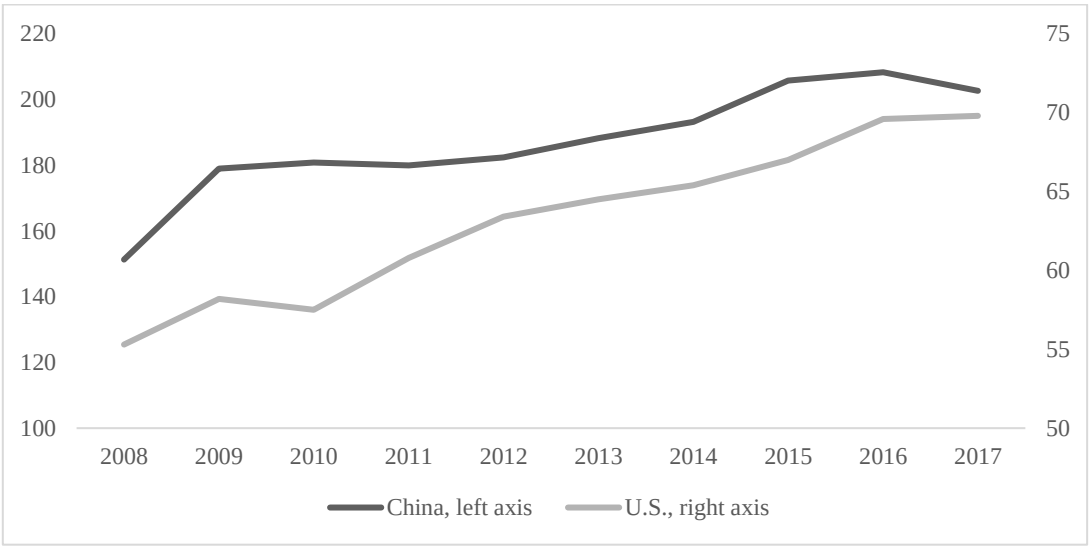

Figure 1. M2/GDP, China and U.S., 2009-2014 (%)

Source: FED and PBOC

Loose monetary policies by both the U.S. and Chinese central banks kept the cost of capital extremely low, providing relief to all leverage entities, and led to substantial rallies in asset prices and modest recoveries in the growth rates of the two economies. Renewed economic growth, easy credit, and consumer confidence together gave new life to Chimerica. China's exports to the U.S. started to rise again in 2010 and the share of China in the U.S. trade deficit increased to over 50% for the first time in its history in December 2012. Continuous appreciation of the yuan against the dollar from April 2010 to January 2014 did not prevent a renewed widening of the bilateral deficit. At the same time, China's foreign currency reserves kept growing, reaching a peak of $3.8 trillion in 2014.

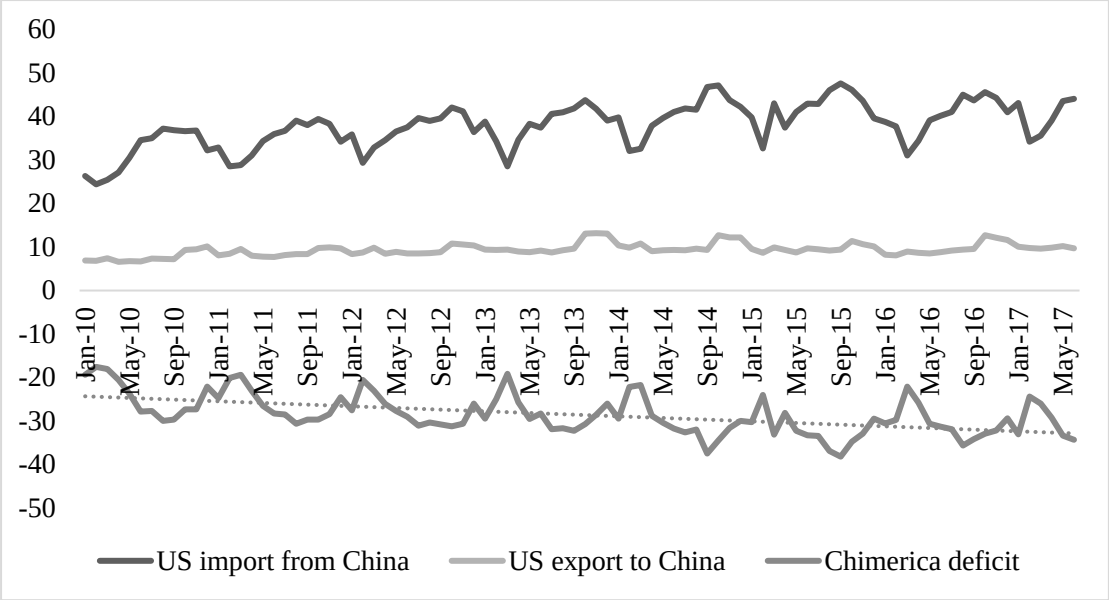

Figure 2. U.S.-China bilateral trade, 2010-2017 (billion USD)

Source: UN Comtrade

In the post-crisis phase of Chimerica, China began to resemble its American counterpart in many ways. Household consumption replaced export and investment in 2011 as the driving force of the Chinese economy, and its contribution to GDP growth has grown continuously since 2011. The private sector increased its contribution to GDP growth. By the end of 2017, small and medium-sized enterprises (SMEs) accounted for 75% of urban employment, over 60% of total GDP, and over 50% of tax payments. However, China also picked up some bad American habits, some of which may be potential sources of future financial instability. According to the Bank of International Settlement (BIS), China's non-financial credit to GDP ratio rose by no less than 48 percentage points between 2009 and 2014, and we believe this number is underestimated by at least 7% as government lending through local government lending vehicles (LGFVs) is not included in it. The Chinese financial system acquired a complex and opaque new superstructure of trusts, wealth-management products and off-balance-sheet entities.

This new Chimerica was not produced by collaborative Sino-American decision-making. Rather, it was the unexpected outcome of independent stimulus plans to fight the domestic repercussions of the global financial crisis. However, Chimerica's second

phase was not that different from its former version in that it remained inherently unsustainable—a feature described by David, Dorn and Hanson (2013) as "the China syndrome" and by Autor, Dorn and Hanson (2016) as "the China shock." In the next section we show how the end of Chimerica 2.0 led inexorably to bilateral conflict.

3. Chimerica 3.0 and trade war

Two events marked the end of Chimerica 2.0. The first was the 2014 announcement by the U.S. Federal Reserve that it intended to withdraw from ("taper") quantitative easing, which signaled the approaching end of the period of ultralow interest rates for the U.S. and caused capital to flow out of emerging markets. The second was China's 2015 loan-fueled, speculative stock market investments and subsequent turbulence following a devaluation of the renminbi. These two events look unconnected at first glance. However, in the eyes of Chinese economic policymakers, they were evidence of large financial risks hidden inside the Chinese economy. From their perspective, unregulated capital outflows created exposure to external financial shocks. At the same time, speculative investment in domestic financial markets could easily distort the country's underdeveloped financial system, increase leverage to a dangerous level, and trigger a financial crisis.

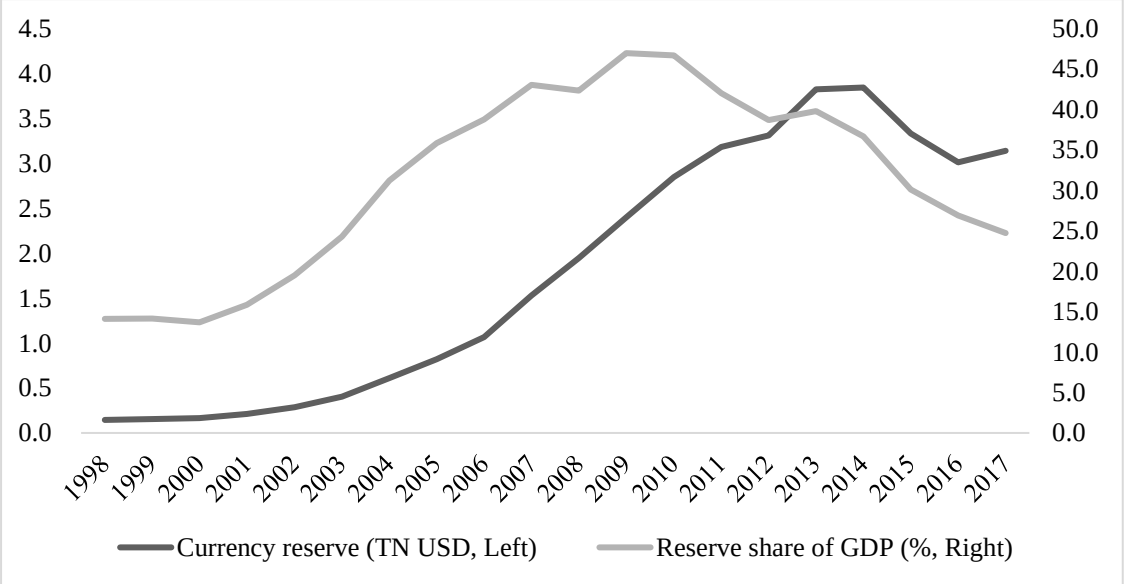

Figure 3. China's currency reserves, 1998-2017

Source: PBoC

To reduce systemic financial risk and avoid a major economic crash, the Chinese government took several anti-crisis policy measures (Xu and Han, 2018). Among them were the foreign exchange policies designed to stabilize the yuan against U.S. dollar and capital controls to avoid a massive decline in foreign exchange reserves, which Chinese authorities saw as insurance against external shocks, given the lessons of the 1997 Asian financial crisis. Through multiple rounds of exchange rate interventions, the PBOC managed to keep the USD/CNY exchange rate floating in an interval between 6.2 and 7, with more severe measures taken whenever the exchange rate neared the boundaries. At the same time, by setting strict limits on the amount of money that could be transferred to overseas accounts and by applying tighter scrutiny to Chinese companies wishing to acquire assets overseas, the PBOC reversed the downward trend in its international reserves, which have since stabilized above $3 trillion.

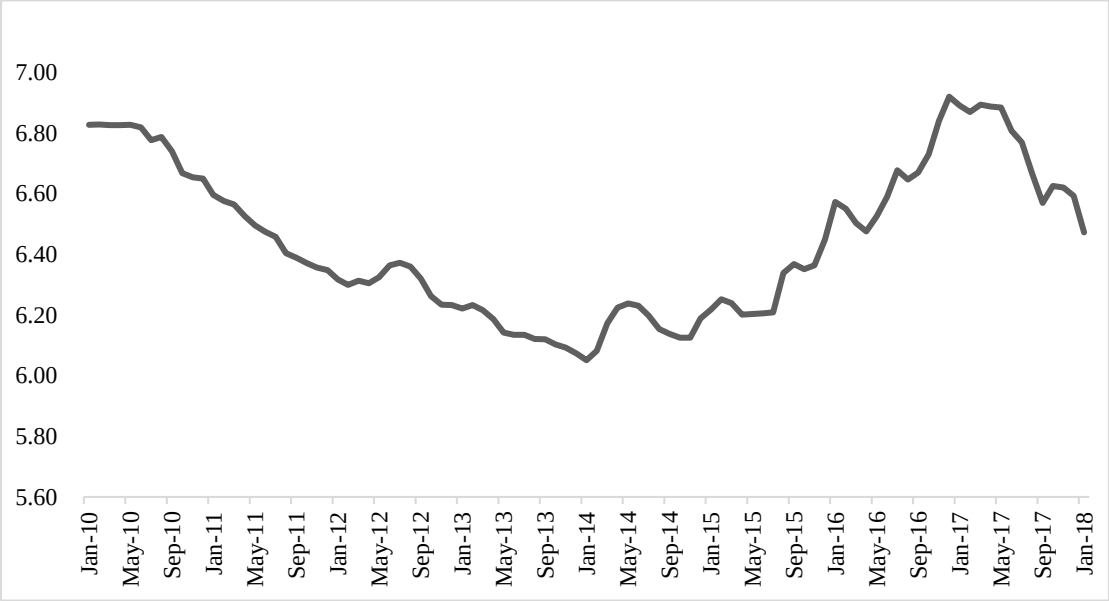

Figure 4. USD/CNY exchange rates (2010-2018)

Source: Federal Reserve

These measures, along with enhanced market confidence in China's ability to tighten capital controls further and actively intervene in the foreign exchange market,

had far-reaching global effects, though Chinese officials at the time seem largely to have ignored these—perhaps because they paid more attention to the decline in China's overall current account surplus, and the shift away from net exports to domestic consumption as the driver of Chinese growth. The fact that the yuan remained to a large extent a managed currency made it less attractive for international investors, thereby contributing to its two-year depreciation against the U.S. dollar from 2014 to 2016. This, in turn, led to a further expansion of the U.S.-China trade deficit. Some Chinese observers, including high-level government officials, would argue that persistent U.S.-China trade deficit is due to the dominant position of the dollar as an international reserve currency, the low American savings rate as well as the tendency of the U.S. government to run large fiscal deficits. However, the U.S. reduced its fiscal deficit significantly after 2011 (Figure 5). Another piece of evidence is that national spending-income gap (Figure 6) has shrunk from over $650 billion in 2008 to less than $200 billion in 2016. The bilateral trade deficit between the U.S. and China, however, did not fall but actually rose.

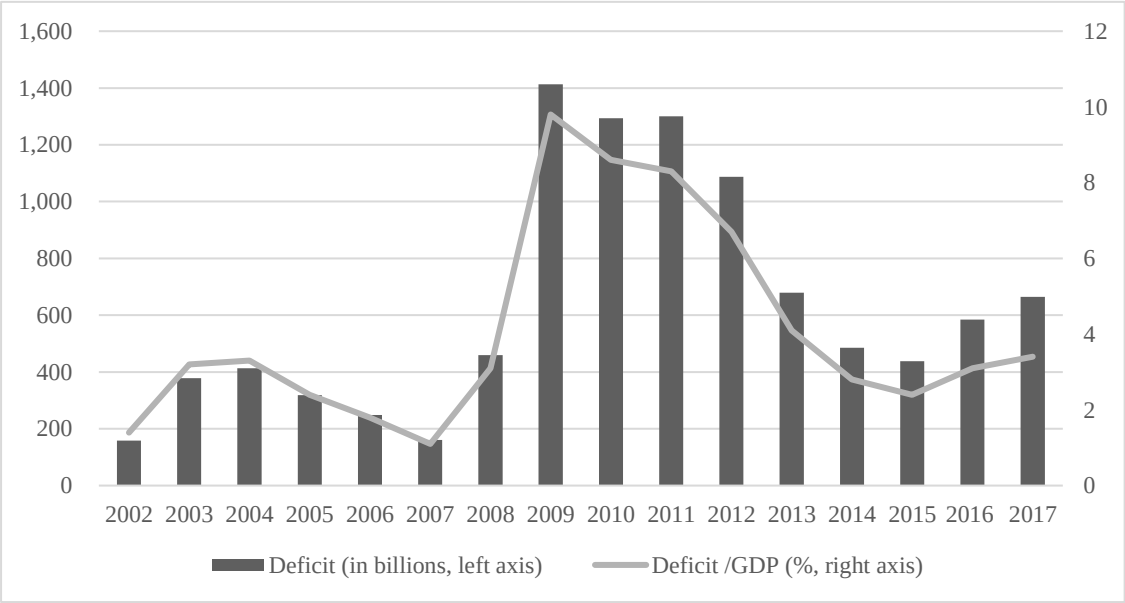

Figure 5. U.S. Deficit (2000-2017)

Source: Congressional Budget Office

Moreover, despite repeated predictions by Western experts of a coming "China crisis," the Chinese economy continued to grow at a significantly faster rate than that of the United States. When China joined the World Trade Organization in 2001, its GDP was 13% of U.S. GDP on a current dollar basis (39% on a PPP basis). On the eve the financial crisis, the proportion was 25% (62%). By 2016 it was 60% (114%), and by 2023 it is projected by the International Monetary Fund to be 88% (151%). Meanwhile, wealthy Chinese investors accumulated a growing quantity of high-end American real estate as well as financial assets. China overtook the United States in terms of manufacturing output in 2010. In terms of technological quality and sophistication, Chinese manufacturing continued rapidly to climb the value chain. Though violations of Western intellectual property rights were less flagrant than in the past, they did not cease.

That these trends had an impact on the 2016 presidential election seems clear. Before Donald Trump was elected president, only seven of his 407 tweets that referred to China were not criticizing China or implying a threat from China. Without an in-depth investigation based on the methodologies of political science, we ourselves cannot judge exactly how significant the issue of China was for the result of the 2016 presidential election. It is true that, according to opinion polls, there was no significant increase in anti-Chinese sentiment in the American electorate as a whole. However, there is compelling evidence that Trump's consistent "China-bashing" tweets and speeches won him votes in areas worst affected by the out-sourcing of manufacturing to China. (According to a county-level study by Cerrato, Ruggieri and Ferrara (2016), a one-point increase in import competition from China was associated with a 2.9 percent increase in support for Trump relative to a county's average support for Republican candidates in the preceding 20 years.) Even had Trump not won the Republican nomination, we believe an alternative Republican president would likely be acting in a similar way—witness Senator Marco Rubio's increasingly hardline stance towards China. Note, too, that this is one of the few issues on which the president enjoys Democratic support, including from experts who would likely have served in a Democratic administration had Hillary Clinton won in 2016 (see e.g., Campbell and

Ratner 2018). We believe the backlash against China was a more or less inevitable consequence of the evolution of Chimerica in the years after 2014, and would have happened—though perhaps in a more subtle form—even if Trump had lost.

4. Impacts of a U.S.-China trade war

In this section we study the potential consequences of a trade war between the world's two biggest economies. Threats of a Sino-American trade war have been with us since before the term Chimerica was coined (Hughes, 2005). This year, however, the Trump administration seems ready for a "good, easy to win" trade war, evidenced by its labeling of China as a "strategic competitor" and threat to American core interests in the 2017 National Security Strategy report (NSS) report unveiled last December, and this year's tariffs. In response, the Chinese government has announced counter-measures against U.S. agricultural exports like soybean and sorghum, with the clear intention of hurting Republican voters in areas vulnerable in this November's midterm elections.

As we summarized in the previous section, this trade war is the result of continuous trade imbalances between the U.S. and China that date back nearly two decades. A full-blown trade war has the potential to reduce bilateral imbalances through tariffs and trade barriers, but its second-order effects on other trade partners will also be considerable. Through empirical investigation, policy analysis, and historical review, we try to provide an overview of the trade war's potential impact on the global economy. Our main finding is that a trade war would hurt China more in relative terms than the United States, reducing Chinese exports and growth significantly more than those of the U.S.

The first outcome we look at is the effect of tariffs and trade negotiations on U.S.-China trade. Imposing tariffs directly on imports from China would of course reduce the volume of imports, which would also tend to reduce the U.S. trade deficit with China—other things being equal. But the indirect effects of tariffs and trade investigations are harder to estimate as both governments' actions could affect broader bilateral relations and have the potential to backfire. For example, U.S. trade

investigations against China could worsen U.S.-China relations and potentially reduce U.S. exports to China. To understand the full effect of a trade war, this influence channel also needs to be estimated.

We use empirical methods to estimate the indirect effects of tariffs and trade investigations on bilateral trade through their effect on international relations. As a measure of China's bilateral foreign relations we use the Tsinghua IMIR index, which is calculated by assigning fixed values to the number, level, and content of diplomatic events and government interactions and then aggregating these values. The events and interactions considered include official and unofficial visits by either government, bilateral and multilateral state-level conferences, government statements on bilateral relations, and other special events. An example of the special events that will change the value of the IMIR index is the opening of a new embassy in China or the other country, which will increase the index by 0.1.

The IMIR index is reported at a monthly basis and covers China's international relations with twelve countries (U.S., Japan, Russia / the Soviet Union, Great Britain, France, India, Germany, Vietnam, South Korea, Australia, Indonesia and Pakistan) from 1950 to 2017. This index allows us to look at the evolution of the diplomatic relations between China and the listed countries over a long period, and make meaningful international comparisons. To investigate not only the first but second order effects of bilateral relations on trade flows, we employ a fixed-effect panel regression using IMIR index as the key explanatory variable, estimating its impact on both bilateral imports and exports. The control variables are the economic and distance variables usually used in gravity models of trade and country fixed effects. The estimated results are shown in table 1.

Table 1. Estimations on the relationship between bilateral relations and trade

	(1)	(2)	(3)	(4)	(5)	(6)
VARIABLES	Import	Import	Import	Export	Export	Export
IMIR relation index	0.00703***	0.00721***	0.00710***	0.00479	0.00600	0.00549
	(0.00242)	(0.00244)	(0.00243)	(0.00381)	(0.00382)	(0.00380)
Controls	Yes	Yes	Yes	Yes	Yes	Yes
Fixed effects	Yes	Yes	Yes	Yes	Yes	Yes
Observations	261	261	261	261	261	261
R-squared	0.103	0.104	0.103	0.095	0.113	0.112

Notes: "Import" measures U.S. import from China, while "export" measures U.S. export to China. Standard errors in parentheses *** p<0.01, ** p<0.05, * p<0.1. Regression (2) and (5) consider countries' cross terms, and regressions (3) and (6) use de-trended variables. The results are robust in all specifications.

According to Table 1, there is a fundamental asymmetry in a trade war between the United States and China. When the U.S. starts trade investigations or imposes tariffs on China, these actions negatively affect U.S.-China relations and lead to restrictions on U.S. imports from China. However, the impact of Chinese retaliatory measures is insignificant according to our estimation. In a companion paper, we investigate the duration of U.S. trade investigations and tariffs and find that their negative impact on imports from China tends to last more than a year, suggesting that a U.S.-initiated trade war can be consistently effective in reducing trade imbalances.

Based on the above empirical investigation, we study the economic significance of a trade war. To do that we assume three different trade war scenarios. In scenario 1, trade conflict is limited to the industries that have been already affected: solar cells and washing machines, steel, and aluminum. In scenario 2, trade conflict expands to other metal and biochemical products. In scenario 3, trade conflict expands to all electronic products and textiles. The corresponding tariff and U.S.-China relation index numbers are calculated using historical data, and the results are shown on a year-to-year basis.

Table 2. Trade war effects on U.S. imports from China

	1 month	3 month	6 month	1 year
Scenario 1	-5.35%	-5.45%	-5.52%	-5.65%
Scenario 2	-10.70%	-10.89%	-11.03%	-11.30%
Scenario 3	-17.09%	-17.65%	-18.07%	-18.85%

Source: UN Comtrade, Tsinghua IMIR and own estimates

Table 2 summarizes our estimates of Chinese exports to the U.S. in three different scenarios at four different time horizons. In the least severe scenario, ongoing trade investigations and imposed tariffs decrease U.S. imports from China by over 5% in one month's time. In the most severe scenario, U.S. imports from China shrink by nearly 20% in one year's time, which would significantly reduce the bilateral trade deficit.

Table 3. Trade war effects on China's total exports

	1 month	3 month	6 month	1 year
Scenario 1	-1.18%	-1.20%	-1.21%	-1.24%
Scenario 2	-2.35%	-2.40%	-2.43%	-2.49%
Scenario 3	-3.76%	-3.88%	-3.98%	-4.15%

Source: UN Comtrade, Tsinghua IMIR and own estimation

We also estimate the effects of a trade war on China's total exports in all three scenarios. The negative impact of a trade war on China's total exports ranges from a 1.2% decline in one month in the mildest scenario to over 4% in one year in the toughest scenario. Considering China's slowing export growth after the global financial crisis, a trade war with U.S. therefore has the potential to erase total export growth and weaken

China's GDP growth. Our estimation, based on the assumption of a fixed structure of GDP, shows that a trade war could reduce China's GDP growth by up to 0.3% on a yearly basis.

By comparison, the U.S. is much less vulnerable. American imports from China are equivalent to around 4% of China's GDP. American exports to China are less than 1% of U.S. GDP. If the Chinese government retaliates by imposing the same tariff on the same volume of goods imported from U.S. the maximum impact on U.S.'s total exports and GDP growth will be -0.83% and -0.08% respectively, indicating a much smaller shock compared with what may happen to China.

Our quantitative analysis above can be seen only as a very rough estimate of the potential magnitude of this trade war, and is far from a precise calculation. Due to the limitations of our empirical strategy, we could not take into account the reactions by the other trade partners of the U.S. For instance, after President Trump announced his steel and aluminum tariffs, the European Union started to consider imposing duties on U.S. imports worth about $3.5 billion. The Canadian foreign affairs minister also stated that Canada would take "responsive measures" to defend its trade interests if any tariffs were imposed, as they are the biggest steel exporter for U.S. The simple model we use cannot possibly cover all these nested trade conflicts. However, the interpretation of our empirical results is very clear: a trade war targeting China would have a persistent rebalancing effect on U.S.-China trade.

How the Chinese authorities respond depends ultimately on their understanding of the potential effects of a trade war. If they opt to focus only on trade retaliation, increasing tariffs on China's imports from U.S. like soybeans would seem to be the obvious response, even if that might seem to run counter to the image China has been trying to present to the world since President Xi Jinping's 2017 Davos speech, as a defender of globalization and free trade.

Another possible response might be to devalue the yuan against U.S. dollar to offset the effects of tariffs on China's total exports and economic growth. The lesson from China's last devaluation in August 2015 is that this may not be a very good idea, however. The PBOC's 2015 devaluation was followed by an additional 6% decline

driven by the foreign exchange market, through which China lost $500 billion of its foreign exchange reserves. But exports did not recover as a result of devaluation, as China's export growth remained negative for a whole year after August 2015. Under the current international monetary system, the real benefit of a devaluation looks questionable, and the added volatility in the foreign exchange market can be costly, especially if it encourages Chinese investors to seek to increase their holdings of overseas assets.

The least costly way for China to react would seem to be a multilateral approach, working with other countries and regions also hit by U.S. tariffs to uphold the global trade system. By requesting dispute settlement within the WTO or imposing countervailing duties on U.S. imports under the Agreement on Subsidies and Countervailing Measures—both of which can be done together—China could avoid the criticisms that would be levelled at unilateral actions.

Yet if the Chinese authorities have been following the Chimerica-related research that we and other scholars have published over the last decade, they would view this trade conflict as a symptom of a much bigger problem. Labeled as a "strategic competitor" in the 2017 National Security Strategy document, China should be expecting more pressure from the U.S. in multiple areas. Ongoing trade conflicts may mark the start of a new period in which both China and U.S. try to get the upper hand in the Chimerica relationship. Even if this round of trade tariffs is, as in the past, the overture to a trade deal rather than a protracted trade war, the Chinese authorities should expect the United States to return to the fray at some future date, and potentially on a larger scale.

5. How Chimerica can be made great again

Regardless of the short-term consequences of a trade war, we believe Chimerica is destined to change. This is because its fundamental economic drivers have essentially disappeared. China's total workforce is shrinking, with rural-to-urban labor migration nearing its end. U.S. spending and income have been converging, with the gap between them falling from its $650 billion peak in 2008 to less than $200 billion after 2011. At

the same time, technological changes are reducing the importance of global supply chains of the sort that are so important to the U.S.-China relationship. Rebalancing current accounts will take time, but it will eventually happen as China's cost of labor increases and China's exchange rate moves from a dirty to a clean float.

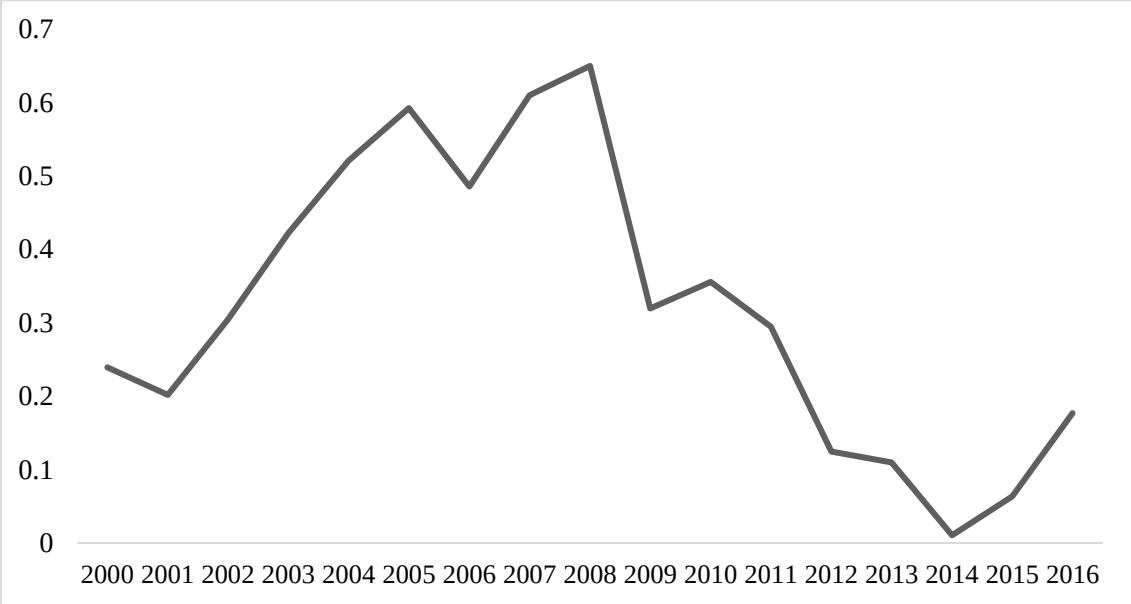

Figure 6. U.S. national spending-income gap ($ trillion)

Source: US Treasury

Still, as President Xi said in his 2017 Davos speech, "no one will emerge as the winner of a trade war." A trade war between the world's two largest economies would affect all other economies, some severely, and could possibly cause trigger a currency war. Major economies would also have to reallocate their outward investments and financial resources, which could cause further fluctuations in global asset prices. The effectiveness of the WTO dispute settlement mechanism could be called into question as both China and the U.S. are large enough to ignore it if they so choose. Thus a trade war could not only spread to other financial and economic areas; it might also set the stage for a fundamental shift away from an institutional order that has an in-built bias in favor of free trade.

That China would suffer more damage from this trade war implies that China has the stronger incentive to avert it. As we showed in section 3, the return of U.S.-China

trade imbalances was to a large extent the result of the Chinese authorities' plan to keep high foreign exchange reserves and to stabilize the yuan against U.S. dollar. This is why China should take responsibility for proposing effective rebalancing measures and seeking policy coordination with the U.S. We think a smarter strategy for China would be to seek to salvage Chimerica through concessions, implicitly acknowledging that it stands to lose more than the U.S. from the death of Chimerica.

Given the risks implied by trade conflict and the changes that have occurred in Chimerica, both countries are in a position to lay out a framework for a more mutually beneficial relationship. We believe any such framework should aim at an orderly reduction of the bilateral trade deficit and, in addition, set up a platform for coordinating and communicating monetary policies, including foreign exchange policies. Reducing the trade deficit is not an unreasonable American political demand, even if it strikes some economists as somewhat pointless. And monetary authorities should communicate transparently to avoid unnecessary negative externalities, increase stability in international monetary system (Taylor, 2017), and set a good example for other central banks.

6. Conclusion

The history of Chimerica in the early years of the 21st century is also the history of the international economy. A combination of China's export-led economic growth and U.S. over-consumption led to a spectacular boom in global asset prices, which was brought to a halt by the 2007-2009 financial crisis. Chimerica proved resilient, however, surviving the crisis in a new form. Nevertheless, as we have shown, Chimerica's survival was not a choice by policy makers, but the unintended result of national stimulus policies. When the central bankers of both the U.S. and China began to retreat from loose monetary policies, Chimerica became a chimera that could not last. The Chinese authorities' intention to maintain high foreign exchange reserves and control their currency has ultimately made Chimerica intolerable for enough Americans to send the U.S. down the road towards protectionist policies and a trade war.

Any economic or financial conflict between the U.S. and China would negatively

impact the world economy. In the words of a Chinese official, speaking in Beijing on the eve of the May 2018 U.S.-PRC trade negotiations, “This will be a testing year. If it goes in the right direction, it will be fine; if it goes in the wrong direction, it will be earth-shaking.” But what is the right direction? The standard response to the imposition of tariffs is to counter with retaliatory tariffs. The standard approach to trade negotiations is to engage in salami slicing, haggling over each product category. In the case of Chimerica, however, such approaches risk a downward spiral, with dangerous implications for global economic stability.

Ultimately, China stands to lose much more than the United States from a prolonged trade war. For that reason, it makes sense for China’s negotiators to abandon the pretense that the bilateral U.S.-PRC trade deficit has nothing to do with Chinese policy. A great deal has changed in the world since the emergence of Chimerica as the fulcrum of the world economy after China’s accession to the WTO. Arrangements that made sense when China was merely a big emerging market now urgently need to be revised to take account of the new economic parity—and increasingly open strategic rivalry—between the two halves of Chimerica. There is a need, in short, for a new balance—and it will only be achieved if China gives ground. The alternative is a Chimerican divorce. That is unlikely to be amicable—and is bound to hurt not only the United States and China, but also the world economy as a whole.

References

Autor, D.H., Dorn, D. and Hanson, G.H., 2016. The China shock: Learning from labor-market adjustment to large changes in trade. *Annual Review of Economics*, 8, pp. 205-240.

Campbell, Kurt M. and Ely Ratner, 2018. The China reckoning. How Beijing defied American expectations. *Foreign Affairs*, March / April 2018.

Cerrato, Andrea, Francesco Ruggieri and Federico Maria Ferrara, 2016. Trump won in counties that lost jobs to China and Mexico. *Washington Post*, December 2, 2016.

David, H., Dorn, D. and Hanson, G.H., 2013. The China syndrome: Local labor market effects of import competition in the United States. *American Economic Review*, 103 (6), pp. 2121-68.

Du, Y., Ju, J., Ramirez, C.D. and Yao, X., 2017. Bilateral trade and shocks in political relations: Evidence from China and some of its major trading partners, 1990-2013. *Journal of International Economics*, 108, pp. 211-225.

Fabre, G., 2009. The twilight of "Chimerica"? China and the collapse of the American model. *Economic and Political Weekly*, pp. 299-307.

Ferguson, N. and Schularick, M., 2007. "Chimerica" and the global asset market boom. *International Finance*, 10 (3), pp. 215-239.

Ferguson, N. and Schularick, M., 2011. The end of Chimerica. *International Finance* 14 (1), pp. 1-26

Hughes, N.C., 2005. A trade war with China? *Foreign Affairs*, pp. 94-106.

Lagarde, C., 2014. The challenge facing the global economy: New momentum to overcome a new mediocre. Speech given at Georgetown University.

Summers, L.H., 2014. U.S. economic prospects: Secular stagnation, hysteresis, and the zero lower bound. *Business Economics*, 49 (2), pp. 65-73.

Taylor, J.B., 2017. An International Monetary System Built on Policy Rules and Strategies. in *Rules for International Monetary Stability: Past, Present and Future*, Hoover Institution Press, Stanford, 2017.

Trigkas, V., 2015. Chimerica in decline? *The Diplomat*, 4.

Xu, X. and Han, A., 2018. Will China Collapse? A Review, Assessment and Outlook, Hoover Economic Working Paper Series.